

IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) An optical fiber for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, comprising:

an annular portion formed by bending an intermediate region ~~thereof~~ of the optical fiber in an annular shape; and

a fixing member for fixing and bundling at least two portions of the optical fiber at a crossing zone of the annular portion two portions,

wherein the fixing member provided at the crossing zone is configured to adjust a radius of the annular shape.

2. (Currently Amended) An optical fiber for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, comprising:

a partial annular portion formed by partially bending an intermediate region ~~thereof~~ of the optical fiber in an arc annular shape; and

a fixing member for fixing and bundling at least two portions of the optical fiber at a crossing zone of the partial-annular portion the two portions,

wherein the fixing member provided at the crossing zone is configured to adjust a radius of the arc shape.

3. (Currently Amended) An optical fiber for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, comprising:

a plurality of partial annular portions formed continuously or intermittently by partially bending [[an]] intermediate region thereof regions of the optical fiber in an annular arc shape, the plurality of partial annular portions are fixed on a member.

4. (Currently Amended) An optical fiber for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, comprising:

an intermediate region thereof of the optical fiber being formed in a spiral shape around a bar. is formed in a three-dimensional shape.

5. (Currently Amended) The optical fiber for irradiation-light according to claim 4, wherein

the irradiation light from a plurality of power sources is incident from the incidence terminal. ~~the intermediate region is formed in a spiral shape.~~

6. (Currently Amended) The optical fiber for irradiation-light according to any one of claims 1 to [[5]] 3, wherein

the irradiation light from a plurality of power sources is incident from the incidence terminal.

7. (Currently Amended) The optical fiber for irradiation-light according to claim 6, comprising:

wherein the optical fiber consists of a single large diameter optical fiber element.

8. (Currently Amended) The optical fiber for irradiation-light transfer according to claim 7,

wherein

a ~~bundle~~ an optical fiber bundle which includes a plurality of optical fiber elements is coupled with the incidence terminal.

9. (Currently Amended) The optical fiber for irradiation-light transfer according to claim [[8]]

5, wherein

the optical fiber consists of a single large diameter optical fiber element. ~~the radius of curvature at the annular portion is adjustable.~~

10. (Currently Amended) The optical fiber for irradiation-light transfer according to claim

[[9]] 8, wherein

the radius of curvature at the annular portion or the partial annular portion is fifty or more times as large as the diameter of the optical fiber.

11. (Currently Amended) The optical fiber for irradiation-light transfer according to claim 10,

wherein

the radius of curvature at the annular portion or the partial annular portion is 75 mm or less.

12. (Original) The optical fiber for irradiation-light transfer according to claim 1, wherein

twice or more wound is formed at the annular portion.

13. (Currently Amended) A light irradiation device comprising:

a light source;

an optical fiber for transferring irradiation light from the light source; and

the optical fiber for irradiation-light transfer according to claim 11.

14. (Currently Amended) The light irradiation device according to claim 13, further comprising a case,

wherein the optical fiber for irradiation-light transfer is provided inside a case.

15. (Currently Amended) The light irradiation device according to claim 13, further comprising a case,

wherein the optical fiber for irradiation-light transfer is provided outside a case.

16. (New) The optical fiber for irradiation-light transfer according to claim 9, wherein
an optical fiber bundle which includes a plurality of optical fiber elements is coupled with
the incidence terminal.

17. (New) A light irradiation device comprising:

a light source;

an optical fiber for transferring irradiation light from the light source; and

the optical fiber for irradiation-light transfer according to claim 16.

18. (New) The light irradiation device according to claim 17, further comprising a case,

wherein the optical fiber for irradiation-light transfer is provided inside a case.

19. (New) The light irradiation device according to claim 17, further comprising a case,
wherein the optical fiber for irradiation-light transfer is provided outside a case.